

Behavioral Health Hospital and Emergency Department Health Services Utilization

**Rhode Island Fee-For-Service Medicaid Recipients
Calendar Year 2000**

Prepared for:

Medicaid Research and Evaluation Project
Division of Health Care Quality, Financing and Purchasing
Rhode Island Department of Human Services

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December 2003

Supported with Funding by the State Coverage Initiatives Program of the Robert Wood Johnson Foundation

Acknowledgements

This report was written and produced by Christine A. Payne, a consultant working with MCH Evaluation, Inc. MCH Evaluation, Inc. has a contract with the State of Rhode Island to provide research and evaluation services for the Department of Human Services. This particular study was funded by the State Coverage Initiatives Program of the Robert Wood Johnson Foundation.

Findings and progress reports on this study were presented monthly to the Evaluation Studies Workgroup. (See Appendix A for a listing of members). Further, the members of the Evaluation Studies Workgroup provided review and comments on earlier drafts of this report.

Thanks go to Chris Leveille of EDS for preparing the 2000 Medicaid Management Information System (MMIS) data extracts. Richard J. Arigo translated the MMIS claims-based data extracts into health services encounter-based and Medicaid enrollee-based files. Holly Tartaglia produced the report's graphs.

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I. EXECUTIVE SUMMARY

MAJOR FINDINGS

Children and Adolescents (Total Recipients = 12,062)

Recipients with at least one hospitalization in calendar year 2000 (863 recipients or 7.2%):

- 51.9% (448 recipients) had at least one hospitalization with a principal, secondary or tertiary diagnosis of mental disorder*.
- 37.5% of recipients with at least one diagnosis of mental disorder had a repeat hospitalization in calendar year 2000 versus 21.2% of recipients with no diagnosis of mental disorder.
- The 51.9% of recipients with at least one hospitalization with a diagnosis of mental disorder accounted for 71.9% of all hospital expenditures.
- Hospital expenditures per recipient were 136.9% higher for recipients with at least one diagnosis of mental disorder than for recipients with no diagnosis of mental disorder.

Recipients with at least one ED visit in calendar year 2000 (2,840 recipients or 23.5%):

- 15.8% (450 recipients) had at least one ED visit with a principal, secondary or tertiary diagnosis of mental disorder.
- 62.9% of recipients with at least one diagnosis of mental disorder had a **repeat ED visit** in calendar year 2000 versus 34.9% of recipients with no diagnosis of mental disorder.
- The 15.8% of recipients with at least one ED visit with a diagnosis of mental disorder accounted for 24.5% of all ED expenditures.
- ED expenditures per recipient were 72.3% higher for recipients with at least one diagnosis of mental disorder than for recipients with no diagnosis of mental disorder.

* We use the major ICD-9 terminology of 'mental disorder' which includes both psychiatric and substance disorders.

Working-Age Adults (Total Recipients = 25,485)

Recipients with at least one hospitalization in calendar year 2000 (4,361 recipients or 17.1%):

- 45.5% (1,984 recipients) had at least one hospitalization with a principal, secondary or tertiary diagnosis of mental disorder.
- 41.1% of recipients with at least one diagnosis of mental disorder had a repeat hospitalization in calendar year 2000 versus 29.2% of recipients with no diagnosis of mental disorder.
- The 45.5% of recipients with at least one hospitalization with a diagnosis of mental disorder accounted for 46.4% of all hospital expenditures.
- Hospital expenditures per recipient were 3.5% higher for recipients with at least one diagnosis of mental disorder than for recipients with no mental disorder diagnosis.

Recipients with at least one ED visit in calendar year 2000 (9,298 recipients or 36.5%):

- 24.7% (2,301 recipients) had at least one ED visit with a principal, secondary or tertiary diagnosis of mental disorder.
- 73.7% of recipients with at least one diagnosis of mental disorder had a repeat ED visit in calendar year 2000 versus 45.6% of recipients with no diagnosis of mental disorder.
- The 24.7% of recipients with at least one ED visit with a diagnosis of mental disorder accounted for 41.7% of all ED expenditures.
- ED expenditures per recipient were 117.2% higher for recipients with at least principal diagnosis of mental disorder than for recipients with no diagnosis of mental disorder.

*Elderly (Total recipients = 24,126)**

Recipients with at least one hospitalization in calendar year 2000 (3,558 recipients or 14.7%):

- 12.5% (444 recipients) had at least one hospitalization with a principal, secondary or tertiary diagnosis of mental disorder.
- 30.4% of recipients with at least one diagnosis of mental disorder had a **repeat hospitalization** in calendar year 2000 versus 21.6% of recipients with no diagnosis of mental disorder.
- The 12.5% of recipients with at least one hospitalization with a diagnosis of mental disorder accounted for 17.7% of all hospital expenditures.
- Hospital expenditures per recipient were 51.3% higher for recipients with at least one diagnosis of mental disorder than for recipients with no diagnosis of mental disorder.

Recipients with at least one ED visit in calendar year 2000 (3,644 recipients or 15.1%):

- 10.0% (365 recipients) had at least one ED visit with a principal, secondary or tertiary diagnosis of mental disorder.
- 57.5% of recipients with at least one diagnosis of mental disorder had a **repeat ED** visit in calendar year 2000 versus 31.3% of recipients with no diagnosis of mental disorder.
- The 10.0% of recipients with at least one ED visit with a diagnosis of mental disorder accounted for 12.2% of all ED expenditures.
- ED expenditures per recipient were 25.7% higher for recipients with at least one diagnosis of mental disorder than for recipients with no diagnosis of mental disorder.

* Medicaid is a secondary payer for elderly fee-for-service recipients. As such, the data are not reflective of total utilization.

DISCUSSION

In calendar year 2000, larger proportions of Rhode Island fee-for-service Medicaid recipients with a hospital or ED diagnosis of mental disorder* -- whether a principal, secondary or tertiary diagnosis of mental disorder -- had repeat hospitalizations and repeat ED visits than did recipients with no diagnosis of mental disorder. Further, in most instances, both hospital and ED expenditures per recipient were higher for persons with mental disorder diagnoses than for recipients with no mental health diagnoses. Some extent of hospital and ED utilization is to be expected by persons with behavioral health problems, especially in the initial and florid phases of a mental disorder. But most behavioral health problems are chronic conditions and adequate treatment involves long-term effort and often a wide range of community support services. Treating behavioral health problems in acute care settings is expensive and often serves only to stabilize a patient. The findings of this report raise a number of questions.

Access, Capacity, Reimbursement

First, are Rhode Island fee-for-service Medicaid recipients able to access non-acute care behavioral health services? Or is access to behavioral health services limited? Is the time a person has to wait to receive behavioral health care so long that seeking

* We use the major ICD-9 terminology of 'mental disorder' which includes both psychiatric and substance disorders.

care in acute care settings becomes a necessity? Is there adequate capacity in the Rhode Island Medicaid's behavioral health care provider network? Do Medicaid reimbursement rates for behavioral health care cover the costs of providing care so as to facilitate the creation and maintenance of an adequate provider network? In a recent *Health Affairs* article, Paul Appelbaum writes: "The failure of insurers and managed care organizations to reimburse providers of mental health services for the cost of care has led to a crisis in access to these services. Unable to sustain continued losses, hospitals are closing psychiatric units, and outpatient services are contracting or closing altogether. The situation has been compounded by the withdrawal of many practitioners from managed care networks and cuts in public-sector mental health services¹".

Coordination of a Comprehensive Scope of Services

Second, for Rhode Island fee-for-service Medicaid recipients, is there a full range of behavioral health services as well as community services available to support persons with behavioral health problems in remaining in the community and progressing toward recovery? Are these behavioral health and community support services coordinated? Or, as the President's New Freedom Commission on Mental Health² indicates, is the mental health service delivery system as fragmented in Rhode Island as it appears to be throughout the country?

Coordination of Physical and Behavioral Health Care Services

Third, in this report many of the data tables present information on Medicaid recipients with no diagnoses of mental disorders, recipients with principal diagnoses of mental disorders and recipients with principal diagnoses of physical disorders but secondary or tertiary mental disorder diagnoses. As the data indicate, larger proportions of persons with principal diagnoses of physical disorders but with co-morbid behavioral health disorders have repeat hospitalizations and ED visits than do persons with only physical health diagnoses. Physical and mental health are intimately related. Are physical and behavioral health care services coordinated for Rhode Island fee-for-service Medicaid recipients?

The Stigma of Mental Illness

Fourth, are some Rhode Island fee-for-service Medicaid recipients with behavioral health problems unwilling to utilize behavioral health services during non-crisis periods? The President's New Freedom Commission on Mental Health identified the stigma surrounding mental illnesses as one of the major obstacles preventing Americans with mental illness from getting the care they deserve². This fact may help to explain why persons may not seek care in less acute care settings and then, in times of crisis, find their only options to be hospitals and emergency departments.

II. BACKGROUND TO THE STUDY

INTRODUCTION

Since 1996, members of the Rhode Island Division of Health Care Quality, Financing and Purchasing's Evaluation Studies Workgroup have been studying the health status and health service utilization of various Medicaid populations. Behavioral health issues often become prominent in these investigations. For example, a study of the health care needs of children with disabilities⁴ found:

Children with mental disabilities had twice the rate of specialty care visits as children with either physical or developmental disabilities. On average, children with developmental disabilities had 12.6 specialty care visits per year; children with physical disabilities had 15.8 specialty care visits per year; and children with mental disabilities had 29.3 specialty care visits per year.

Children with mental disabilities had the highest number of days spent in the hospital. Of children who were hospitalized, children with mental disabilities, on average, spent 72.6 days in the hospital per year, compared to 24 days for children with physical disabilities and only 3.2 days for children with developmental disabilities.

Caregivers of children with mental disabilities faced the most barriers to care. They were more likely to feel overwhelmed due to their child's needs, unable to work due to care-taking responsibility, unable to find child care and not able to get support from family and friends.

In a needs assessment survey of working-age adults with physical disabilities and chronic health conditions⁵, results showed that over 14% of respondents reported mental disorders as their most serious health problem in the past year. Nearly 28% reported that in the past month their mental health was not good and 37% reported they felt worried, tense or anxious in the past month.

In an analysis of health status by health insurance status⁶, persons with Medicaid coverage were found to suffer depression and anxiety for more days of the month than did persons with either private insurance or no health insurance. On average, those with Medicaid coverage reported feeling sad, blue or depressed 7.6 days a month, versus 2.4 days for persons with private insurance and 5.2 days for persons with no insurance.

Further, in calendar year 2000, mental disorders were the leading cause of hospitalizations and the third leading cause of ED visits for working-age fee-for-service Medicaid recipients⁷ and the leading cause of hospitalizations and one of the four leading causes of ED visits for children and adolescent fee-for-service Medicaid recipients⁸.

MEDICAID'S ROLE IN FINANCING HEALTH CARE FOR BEHAVIORAL HEALTH DISORDERS

It is not surprising that studies of the health status of Medicaid recipients indicate a significant extent of behavioral health problems. This is the case because Medicaid provides health care coverage not only to persons with severe and persistent mental disorders as well as persons with substance disorders but also to populations at high risk of experiencing these health problems.

First, Medicaid is the main source of funding for persons with severe and persistent mental illness, those persons enrolled in Supplemental Security Income (SSI).

For SSI, Medicaid provides financing for a key set of services for people with severe and persistent mental disorders (including general medical care). People with mental disorders make up approximately 34 percent (or 1.2 million) of SSI beneficiaries ages 18-64. Since the late 1980s the fastest-growing components of SSI enrollment have been people with mental disorders and musculoskeletal impairments. Thus, Medicaid is an important payer for care for some of the most impaired people with mental disorders in the United States(p. 102)⁹.

Second, Medicaid programs pay for health coverage for people enrolled in Temporary Assistance for Needy Families (TANF). These persons experience severe personal and socio-economic stress -- poverty, unemployment, homelessness, racism, violence and social isolation -- which leaves them vulnerable to developing depressive and anxiety related disorders as well as substance disorders.

Third, Medicaid programs provide health care coverage to persons disabled with chronic physical health problems and disabilities. Living in chronic pain, insecurity about the future and often social isolation puts these people at high risk of suffering behavioral health disorders.

According to the President's New Freedom Commission on Mental Health: "In 1997, the US spent more than \$1 trillion on health care, including almost \$71 billion on treating mental illnesses. Mental health expenditures are predominantly publicly funded at 57%, compared to 46% of overall health care expenditures".² It is estimated that Medicaid is now the largest source of public funding for mental health services¹⁰. Medicaid is also a major payer of substance abuse treatment services¹¹.

BEHAVIORAL HEALTH INDICATORS

Introduction

We began this study with the design to build a health indicator system for Rhode Island fee-for-service Medicaid recipients with behavioral health disorders. We hoped to build an indicator system that would allow us to monitor changes over time and compare behavioral health statistics for Rhode Island Medicaid recipients with other states' Medicaid recipients. Establishing trends and comparisons, we believed, would assist in identifying gaps in services, areas of success and areas in need of improvement. This section presents an overview of some of the national and state-level behavioral health statistics we were able to identify. The statistics cover areas such as prevalence rates, mortality, quality of life, and consumer-based statistics on access to care, quality and adequacy of care and satisfaction with care. Many of the statistics, however, are not available at the state level, some have no or unreliable health care coverage data, and some document problems not easily addressed by Medicaid programs.

As presented in the following section and to be fully explored throughout the remainder of this report, our attention returned to an examination of hospital and emergency department utilization as documented in the Medicaid Management Information System (MMIS). We compare the extent and frequency of the use of these two types of health services for Medicaid recipients with behavioral health diagnoses to Medicaid recipients with physical diagnoses only.

Prevalence

Behavioral health problems include psychiatric and substance disorders. There are no good prevalence estimates for behavioral health problems at the state level. Most sources of prevalence estimates are obtained through large nation-wide surveys such as the National Co-Morbidity Survey. Based upon national surveys, the National Institute of Mental Health (NIMH) reports that an estimated 22.1 percent of Americans ages 18 and older -- about 1 in 5 adults -- suffer from a diagnosable mental disorder in a given year. This figure translates to 44.3 million people. At least one in five children and adolescents between ages 9 and 17 has a diagnosable mental disorder and about 5% of children and adolescents are extremely impaired by mental, behavioral, and emotional disorders. In later life, an estimated 8.6 million persons ages 65 and older (25%) experience specific mental disorders, such as depression, anxiety, substance abuse, and dementia, that are not part of normal aging. The NIMH also reports that many people suffer from more than one mental disorder at a given time. Overall, 4 of the 10 leading causes of disability in the U.S. are mental disorders - major depression, bipolar disorder, schizophrenia, and obsessive-compulsive disorder¹². The Substance Abuse and Mental Health Services Administration (SAMHSA) reports that in 2001, 17 million persons ages 12 or older were dependent on or abused either alcohol or illicit drugs¹³. And it is estimated that in the United States approximately 40 million people ages 18 to 64 has a diagnosis of mental disorder alone or a co-occurring mental and addictive disorder in a given year. 1990 data developed by the *Global Burden of Disease Study* conducted by the World Health Organization, the World Bank, and Harvard University, reveal that mental illness, including suicide, accounts for over 15 percent of the burden of disease in established market economies such as the United States. This is more than the disease burden caused by all cancers and is second only to heart disease¹⁴.

Mortality

Mortality statistics are available yearly and at the state level. There is, however, no information on health care coverage on death records. Further, though behavioral health problems are a contributing factor to many premature deaths, only a few causes of death can be identified as potentially directly caused by behavioral health problems -- namely, suicide, chronic liver disease and cirrhosis and Alzheimer's disease. In comparison with other states, Rhode Island has the fourth lowest age-adjusted suicide rate, the fourth highest age-adjusted rate of death due to chronic liver-disease and cirrhosis, and falls in the middle range with respect to death due to Alzheimer's disease¹⁵.

Quality of Life

Quality of Life indicators are typically derived from self-report surveys, especially from the Behavioral Health Risk Factor Surveillance Survey and the Youth Risk Behavioral Surveillance System. These two surveillance systems provide annual data at the state level and with health insurance information. In comparison with other states' resident adults, Rhode Islanders' 2001 responses to questions concerning their rating of their general health, physical health and mental health were about average¹⁶. In the mid-1990s, Rhode Islanders also were in the middle range with respect to self-reported frequent mental distress¹⁷. However in 2001, Rhode Island ranked fourth among states for having the highest proportion of residents who drink alcohol on 21-31 days of the month¹⁵. Year 2001 statistics for Rhode Island youth were similar to national statistics for young people with respect to alcohol and drug use and to suicide ideation, plans and attempts¹⁸.

Consumer-based

There are few sources of comparable data for consumer self-reports of access to care, quality and adequacy of care, and satisfaction with care. Efforts, however, are underway to develop such data systems. Rhode Island was one of 16 states participating in a pilot study on consumer-based mental health statistics. These data do not include health insurance information. Statistics from this study were collected from 1998 through 2000 and indicate that Rhode Islanders have:

- average or better consumer participation in treatment planning,
- average or better consumer perception of good access,
- average or better consumer perception of the quality and appropriateness of services, and
- average or better consumer perception of positive health change¹⁹.

HOSPITAL AND EMERGENCY DEPARTMENT UTILIZATION FOR BEHAVIORAL HEALTH DISORDERS

In earlier investigations into hospital and ED use among fee-for-service Medicaid recipients, we discovered that in calendar year 2000, mental disorders were the leading cause of hospitalizations and the third leading cause of ED visits for working-age recipients and the leading cause of hospitalizations and one of the four leading causes of ED visits for children and adolescent recipients. We decided to delve more deeply into these health services utilization statistics. In particular, we decided to compare the extent and frequency of the use of these two types of health services for Medicaid recipients with behavioral health diagnoses to Medicaid recipients with physical diagnoses only. Also, given that many Medicaid recipients have co-morbidities, we decided to examine not only principal diagnoses but secondary and tertiary diagnoses as well. In the remainder of this report, we examine claims-based data from the Medicaid Management Information System (MMIS) for three fee-for-service Medicaid populations: children and adolescents, working-age adults and the elderly.

METHODS

This chartbook presents information on hospital and emergency department utilization for fee-for-service Medicaid recipients. We examine claims-based data from the Medicaid Management Information System (MMIS) for three fee-for-service Medicaid populations: children and adolescents, working-age adults and the elderly.

From the MMIS, a listing of recipients was extracted for recipients who: (1) were enrolled in the Medicaid Program anytime during calendar year 2000 and (2) who were enrolled in fee-for-service Medicaid. The MMIS data have been re-worked to produce data on the basis of individual hospitalizations, individual emergency department visits and individual recipients.

For each recipient, we obtained demographic information on age and sex. We also extracted from the MMIS information all paid regular and paid adjusted claims of claim types: I – Inpatient, W – Institutional Crossover, O – Outpatient, and X – Professional Crossover. For each claim, we obtained information on principal, secondary and tertiary diagnoses. Diagnosis information is based on the International Classification of Diseases Codes, Version 9 (ICD-9). From the dates of service information, we aggregated data to produce information for individual hospitalizations and individual emergency department visits. We calculated the number of hospitalizations and emergency department visits for each recipient.

It should be noted that Medicaid is a secondary payer for elderly fee-for-service recipients. As such, the data are not reflective of total utilization. It should also be noted that in the presentation of hospital and ER diagnosis data, we use the major ICD-9 terminology of ‘mental disorders’ which includes both psychiatric and substance disorders. In this report, all other diagnoses are referenced as ‘physical disorders’.

III. RESULTS

A. CHILDREN AND ADOLESCENTS

1. MEDICAID POPULATION DESCRIPTION

TABLE 1-A. Medicaid Population: Children and Adolescents (Ages 21 and Under)
Calendar Year 2000 - Fee-For-Service Medicaid Recipients

	Total Recipients		SSI		Katie Becket/ Waiver		Foster/ Adoption Subsidy		Foster/ Substitution	
	#	%	#	%	#	%	#	%	#	%
TOTAL	12,062	100.0	5,424	45.0	1,012	8.4	1,945	16.1	3,681	30.5
AGE										
Under 5	1,833	15.2	700	12.9	218	21.5	242	12.4	673	18.3
5 to 12	4,736	39.3	2,109	38.9	548	54.2	1,067	54.9	1,012	27.5
13 to 17	3,301	27.4	1,344	24.8	211	20.9	477	24.5	1,269	34.5
18 to 21	2,192	18.2	1,271	23.4	35	3.5	159	8.2	727	19.8
SEX										
Female	4,878	40.4	1,987	36.6	347	34.3	904	46.5	1,640	44.6
Male	7,184	59.6	3,437	63.4	665	65.7	1,041	53.5	2,041	55.5

2. HOSPITAL STAYS AND ED VISITS BY PRINCIPAL DIAGNOSIS

Table 2-A and Graph 1-A.

- In calendar year 2000, children and adolescent fee-for-service Medicaid recipients had a total of 1,357 hospitalizations.
- Mental disorders were the leading cause of these hospitalizations. There were 638 hospitalizations (47.0%) with a principal diagnosis of mental disorder.
- Whereas only 13.0 % of hospitalizations among children under age 5 had a principal diagnosis of mental disorders, 54.0% of hospitalizations among the 5 to 12 age group had a principal diagnosis of mental disorder, 63.5% among the 13 to 17 age group and 48.5% among the 18 to 21 age group.
- 40.7% of hospitalizations among the females in this population had a principal diagnosis of mental disorder, 51.2% of hospitalizations among the males had a principal diagnosis of mental disorder.

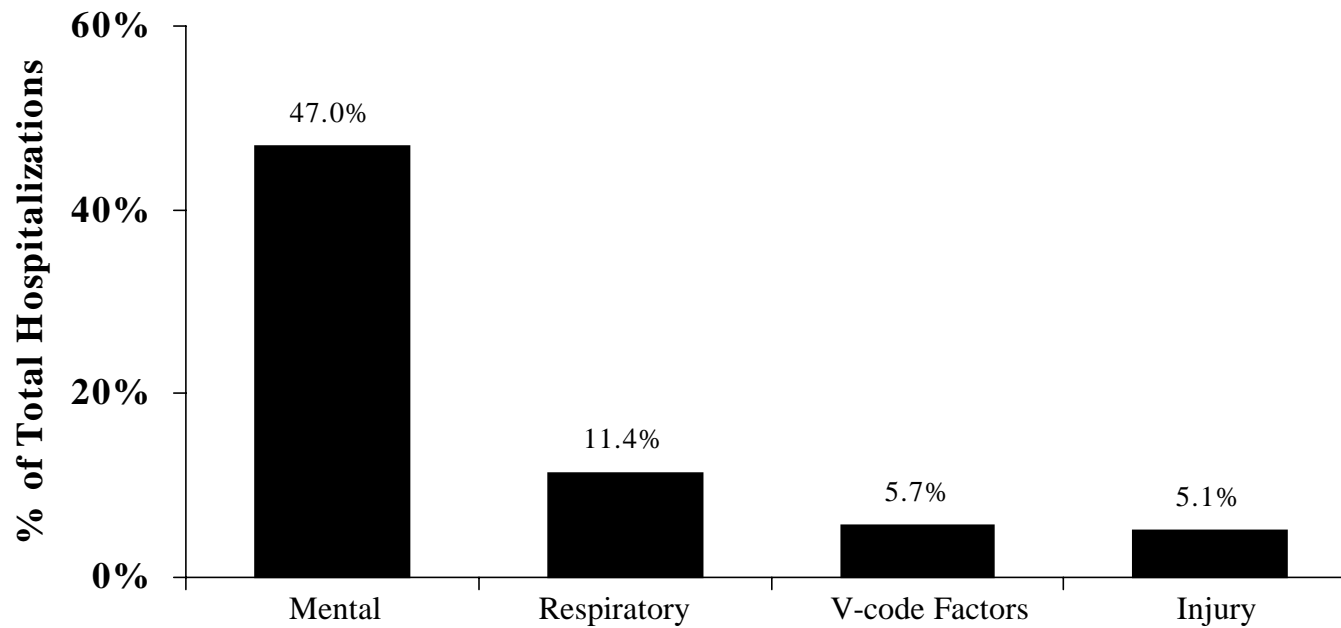
Table 2-A and Graph 2-A.

- In calendar year 2000, children and adolescent fee-for-service Medicaid recipients had a total of 5,344 ED visits.
- Mental disorders were among the four leading causes of these ED visits. There were 607 ED visits (11.7%) with a principal diagnosis of mental disorder.
- 16.6% of ED visits among the age 13 to 17 population had a principal diagnosis of mental disorder.
- Other leading causes of ED visits included injury and poisoning, ill-defined conditions and respiratory conditions.

TABLE 2-A. Hospital Stays and ED Visits by Principal Diagnosis
FFS Medicaid Recipients Ages 21 and Under/Calendar Year 2000

	Hospital Stays				ED Visits			
	Total		Mental Disorder Principal Diagnosis		Total		Mental Disorder Principal Diagnosis	
	#	%	#	%	#	%	#	%
TOTAL	1,357		638		5,344		607	
AGE								
Under 5	284	20.9	37	5.8	779	14.6	4	0.7
5 to 12	420	31.0	227	35.6	1,400	26.2	152	25.0
13 to 17	381	28.1	242	37.9	1,624	30.4	269	44.3
18 to 21	272	20.0	132	20.7	1,541	28.8	182	30.0
SEX								
Female	538	39.7	219	34.3	2,467	46.2	255	42.0
Male	819	60.4	419	65.7	2,877	53.8	352	58.0

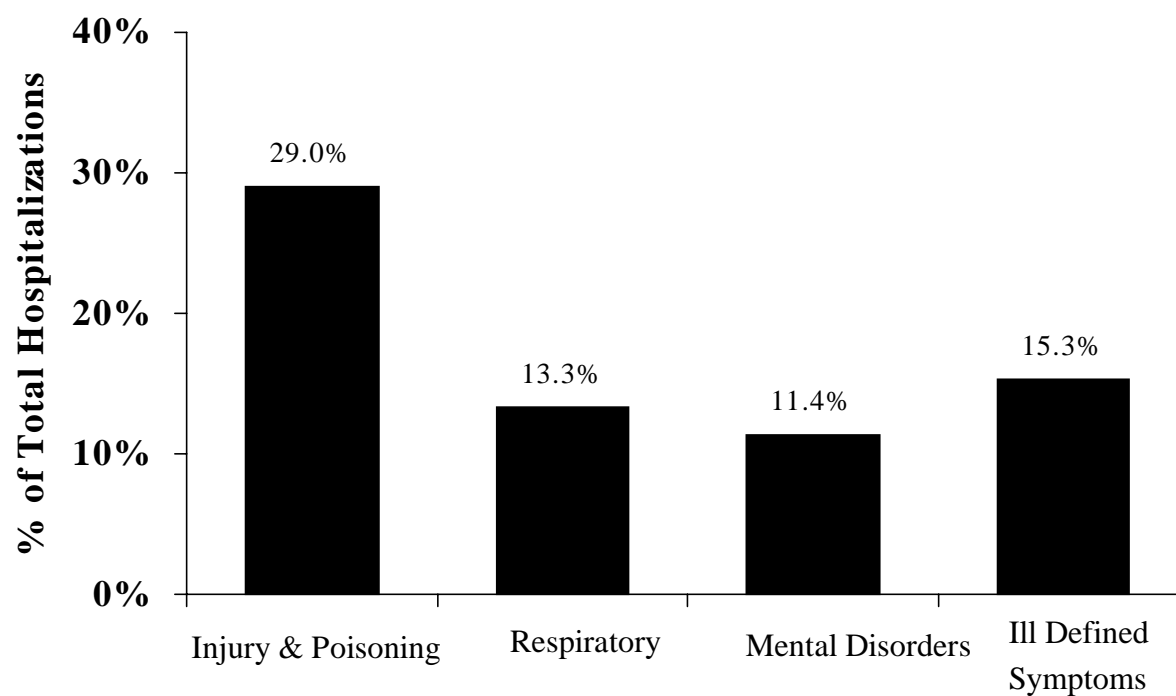
Graph 1-A: Leading Causes of Hospitalization by Principal Diagnosis



Data Source: Medicaid Data Archive

MMIS CY 2000, Children ≤ 21 on FFS Medicaid

Graph 2-A: Leading Causes of Emergency Department Visits by Principal Diagnosis



Data Source: Medicaid Data Archive

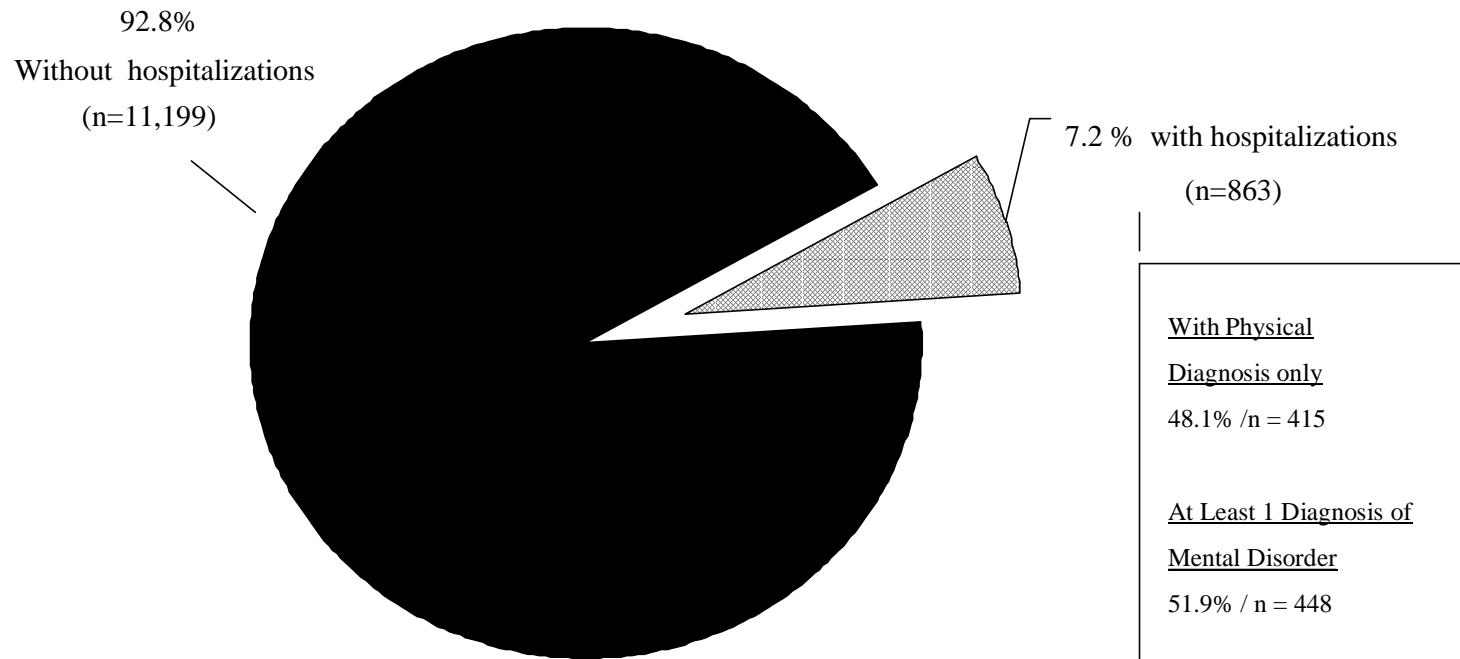
MMIS CY 2000, Children ≤ 21 on FFS Medicaid

3. RECIPIENTS WITH HOSPITALIZATIONS BY DIAGNOSIS: PHYSICAL VS. MENTAL

Graph 3-A, Table 3-A and Graph 4-A.

- In calendar year 2000, 7.2% of children and adolescent fee-for-service Medicaid recipients, or 863 recipients, had at least one hospitalization.
- Of recipients with at least one hospitalization, 51.9% (448 recipients) had at least one principal, secondary or tertiary diagnosis of mental disorder.
- Recipients with at least one diagnosis of mental disorder had more frequent hospitalizations than those recipients with no mental disorder diagnoses -- 37.5% of recipients with at least one diagnosis of mental disorder had a repeat hospitalization in calendar year 2000 versus 21.2% of recipients with no diagnosis of mental disorder.

**Graph 3-A: Percent of Children and Adolescents with Hospitalizations
by Diagnoses¹: Physical vs. Mental**
Fee-For-Service Medicaid Recipients², Ages 21 and Under
Calendar Year 2000

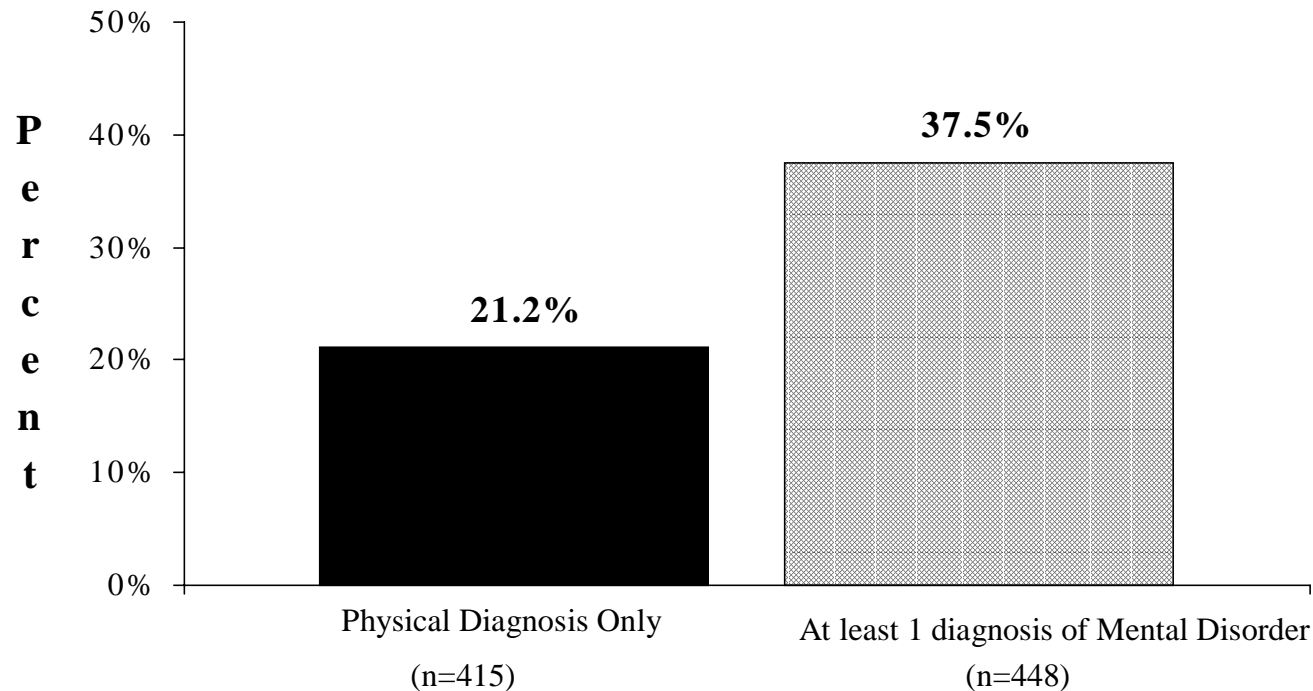


1. Includes Principal, Secondary or Tertiary Diagnosis
2. Total Recipients = 12,062

TABLE 3-A. Numbers of Hospitalizations and ED Visits by Diagnosis: Physical vs. Mental
Recipients With at Least One Hospital Stay in Calendar Year 2000
 Fee-for-Service Medicaid Recipients Ages 21 and Under

	Total Enrollees	With No Hospital Stay with a Principal, Secondary or Tertiary Diagnosis of Mental Disorder	With at Least One Hospital Stay with a Principal Diagnosis of Mental Disorder	With No Hospital Stay with a Principal Diagnosis of Mental Disorder but with at Least One Secondary or Tertiary Diagnosis of Mental Disorder
With a Hospital Stay:	863	415 (48.1%)	395 (45.8%)	53 (6.1%)
Hospitalizations:				
One	70.3	78.8	61.8	67.9
Two	17.5	12.3	22.8	18.9
Three or more	12.2	8.9	15.4	13.2
ER Visits:	(615) / (71.3%)	(302) / (72.8%)	(264) / (66.8%)	(49) / (92.5%)
One	40.2	43.7	36.0	40.8
Two	23.3	23.2	24.6	16.3
Three or more	36.6	33.1	39.4	42.9

Graph 4-A: Percent of Children and Adolescents with Repeat Hospitalizations by Diagnoses ¹: Physical vs. Mental
Fee-For-Service Medicaid Recipients ², Ages 21 and Under
Calendar Year 2000



1. Includes Principal, Secondary or Tertiary Diagnosis

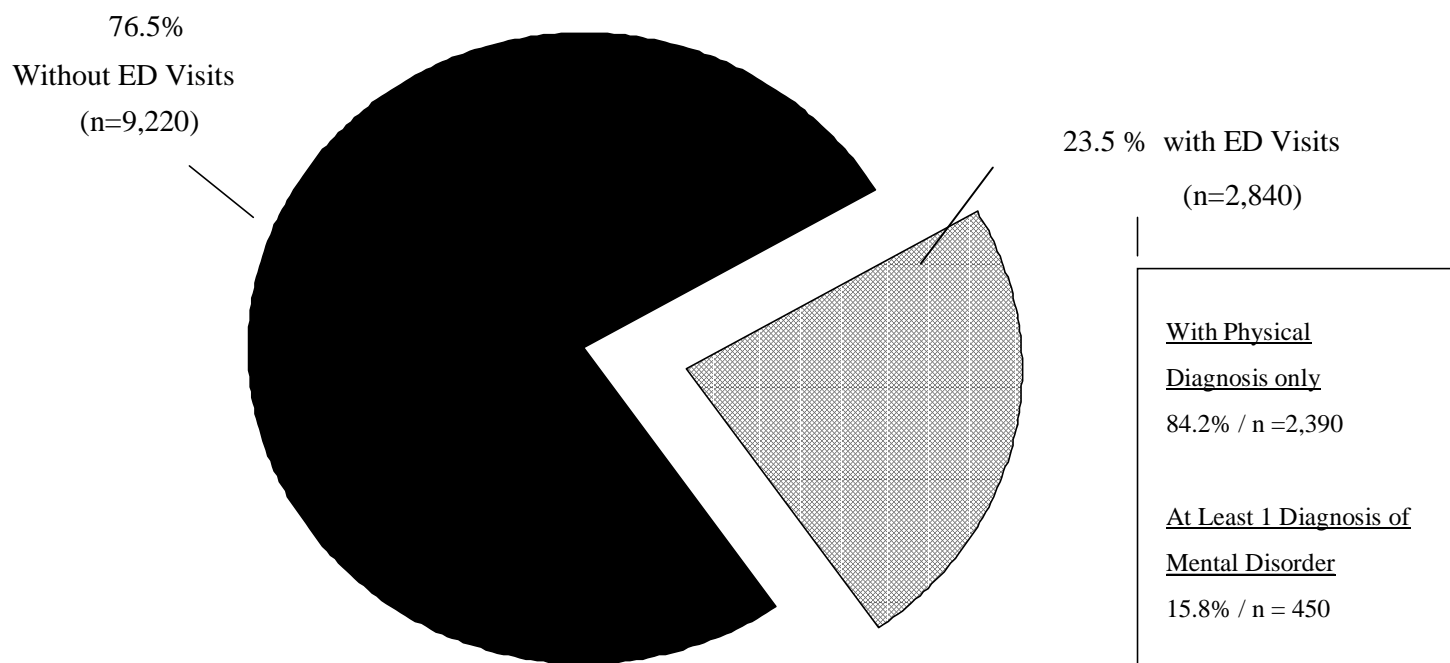
2. Total Recipients =12,062

4. RECIPIENTS WITH ED VISITS BY DIAGNOSIS: PHYSICAL VS. MENTAL

Graph 5-A, Table 4-A and Graph 6-A.

- In calendar year 2000, 23.5% of children and adolescent fee-for-service Medicaid recipients, or 2,840 recipients, had at least one ED visit.
- Of recipients with at least one ED visit, 15.8% (450 recipients) had at least one principal, secondary or tertiary diagnosis of mental disorder.
- Recipients with at least one diagnosis of mental disorder had more frequent ED visits than recipients with no mental disorder diagnoses -- 62.9% of recipients with at least one diagnosis of mental disorder had a repeat ED visit in calendar year 2000 versus 34.9% of recipients with no diagnosis of mental disorder.
- Further, a larger proportion of recipients with at least one ED visit with some diagnosis of mental disorder had a hospitalization than did recipients with no ED diagnosis of mental disorder -- 51.3% of recipients with at least one diagnosis of mental disorder had a hospitalization versus 16.1% of recipients with no diagnosis of mental disorder.
- Finally, a larger proportion of recipients with at least one ED visit with some diagnosis of mental disorder had more frequent hospitalizations than recipients with ED visits with no diagnosis of mental disorder -- 72.3% of recipients with a mental health diagnosis ED visit and a hospitalization had more than one hospitalization in 2000 versus 52.4% of recipients with no mental health diagnosis ED visit and a hospitalization.

**Graph 5-A: Percent of Children and Adolescents with ED Visits
by Diagnoses¹: Physical vs. Mental**
Fee-For-Service Medicaid Recipients², Ages 21 and Under
Calendar Year 2000

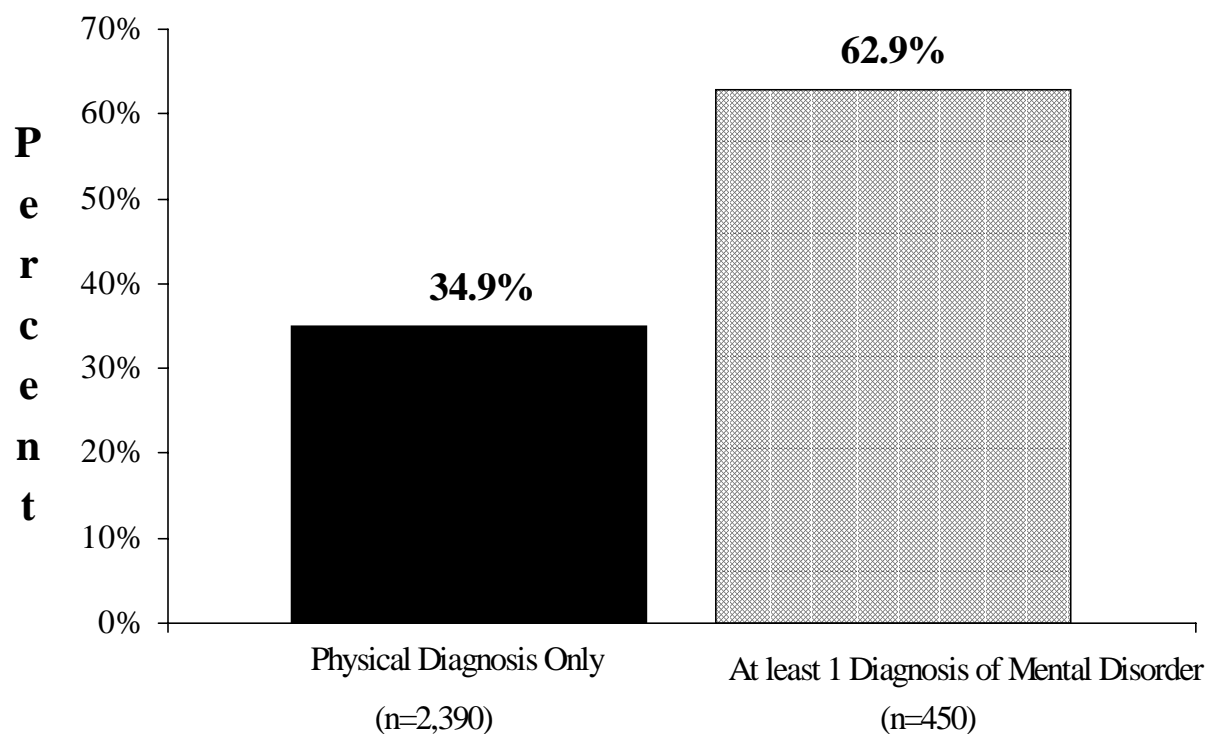


1. Includes Principal, Secondary or Tertiary Diagnosis
2. Total Recipients = 12,062

TABLE 4-A. Numbers of ED Visits and Hospitalizations by Diagnosis: Physical vs. Mental
Recipients With at Least One ED Visit in Calendar Year 2000
 Fee-for-Service Medicaid Recipients Ages 21 and Under

	Total Enrollees	With No ED Visit with a Principal, Secondary or Tertiary Diagnosis of Mental Disorder	With At Least One ED Visit with a Principal Diagnosis of Mental Disorder	With No ED Visit with a Principal Diagnosis of Mental Disorder but with at Least One Secondary or Tertiary Diagnosis of Mental Disorder
With an ED Visit:	2,840	2,390 (84.2%)	370 (13.0%)	80 (2.8%)
ER Visits:				
One	60.6	65.1	35.9	42.5
Two	20.3	19.6	23.8	25.0
Three or more	19.0	15.3	40.3	32.5
Hospitalizations:	(615) / (21.7%)	(384) / (16.1%)	(207) / (55.9%)	(24) / (30.0%)
One	40.2	47.7	26.1	41.7
Two	23.3	21.9	25.6	25.0
Three or more	36.6	30.5	48.3	33.3

**Graph 6-A: Percent of Children and Adolescents with Repeat ED Visits
by Diagnoses ¹: Physical vs. Mental**
Fee-For-Service Medicaid Recipients ², Ages 21 and Under
Calendar Year 2000



1. Includes Principal, Secondary or Tertiary Diagnosis
2. Total Recipients =12,062

5. EXPENDITURES BY DIAGNOSIS: PHYSICAL VS. MENTAL

Tables 5-A and 6-A.

- 48.1% of children and adolescent fee-for-service Medicaid recipients with at least one hospitalization had no diagnosis of mental disorder and accounted for 28.1% of all hospital expenditures in calendar year 2000. The 51.9% of recipients with at least one hospitalization with at least one diagnosis of mental disorder accounted for 71.9% of all hospital expenditures.
- Hospital expenditures per recipient were 159.0% greater for recipients with at least one principal diagnosis of mental disorder than for recipients with no diagnosis of mental disorder. And hospital expenditures per recipient were 27.6% less for recipients with no principal diagnosis of mental disorder but at least one secondary or tertiary diagnosis of mental disorder than they were for recipients with no diagnosis of mental disorder.
- Overall, hospital expenditures per recipient were 136.9% higher for recipients with some diagnosis of mental disorder than for recipients with no diagnosis of mental disorder.
- 84.2% of children and adolescent fee-for-service Medicaid recipients with at least one ED visit had no diagnosis of mental disorder and accounted for 75.5% of all ED expenditures. The 15.8% of recipients with at least one ED visit with a diagnosis of mental disorder accounted for 24.5% of all ED expenditures.
- ED expenditures per recipient were 68.7% greater for recipients with at least one principal diagnosis of mental disorder than for recipients with no diagnosis of mental disorder. And ED expenditures per recipient were 87.9% greater for recipients with no principal diagnosis of mental disorder but at least one secondary or tertiary diagnosis of mental disorder than they were for recipients with no diagnosis of mental disorder.
- Overall, ED expenditures per recipient were 72.3% higher for recipients with some diagnosis of mental disorder than for recipients with no diagnosis of mental disorder.

TABLE 5-A. Hospital Use and Expenditures by Diagnosis: Physical vs. Mental
Recipients With at Least One Hospital Stay in Calendar Year 2000
 Fee-for-Service Medicaid Recipients Ages 21 and Under

	With No Hospital Stay with a Principal, Secondary or Tertiary Diagnosis of Mental Disorder	With at Least One Hospital Stay with a Principal Diagnosis of Mental Disorder	With No Hospital Stay with a Principal Diagnosis of Mental Disorder but with at Least One Secondary or Tertiary Diagnosis of Mental Disorder
With a Hospitalization (7.2% of all Recipients):	415	395	53
Percent (of 863 Recipients with a hospitalization)	48.1	45.8	6.1
Number of Hospitalizations (%):			
One	78.8	61.8	67.9
Two	12.3	22.8	18.9
Three or more	8.9	15.4	13.2
Hospital Expenditures:	(\$7,321,472)	(\$18,049,113)	(\$677,236)
Percent of all Hospital Expenditures	28.1	69.3	2.6
Expenditures per Recipient	17,642	45,694	12,778

TABLE 6-A. ED Use and Expenditures by Diagnosis: Physical vs. Mental
Recipients With At Least One ED Visit in Calendar Year 2000
 Fee-for-Service Medicaid Recipients Ages 21 and Under

	With No ED Visit with a Principal, Secondary or Tertiary Diagnosis of Mental Disorder	With at Least One ED Visit with a Principal Diagnosis of Mental Disorder	With No ED Visit with a Principal Diagnosis of Mental Disorder but with at Least One Secondary or Tertiary Diagnosis of Mental Disorder
With an ED Visit (23.5% of all Recipients):	2,390	370	80
Percent (of 2,840 Recipients with an ED visit)	84.2	13.0	2.8
Number of ED Visits (%):			
One	65.1	35.9	42.5
Two	19.6	23.8	25.0
Three or more	15.3	40.3	32.5
ED Expenditures:	(\$733,968)	(\$191,813)	(\$46,130)
Percent of all ED Expenditures	75.5	19.7	4.8
Expenditures per Recipient	307	518	577

III. RESULTS

B. WORKING-AGE ADULTS

1. MEDICAID POPULATION DESCRIPTION

TABLE 1-B. Medicaid Population: Working-Age Adults (Ages 21 to 64)
Calendar Year 2000 – Fee-For Service Medicaid Recipients

	Total Recipients	
	#	%
TOTAL	25,485	100.0
AGE		
21 to 24	1,432	5.6
25 to 29	1,874	7.4
30 to 34	2,245	8.8
35 to 39	3,175	12.5
40 to 44	3,678	14.4
45 to 49	3,559	14.0
50 to 54	3,272	12.8
55 to 59	3,178	12.5
60 to 64	3,072	12.1
SEX		
Female	13,793	54.1
Male	11,692	45.9

2. HOSPITAL STAYS AND ED VISITS BY PRINCIPAL DIAGNOSIS

Table 2-B and Graph 1-B.

- In calendar year 2000, working-age fee-for-service Medicaid recipients had a total of 7,397 hospitalizations.
- Mental disorders were the leading cause of these hospitalizations. There were 2,020 hospitalizations (27.3%) with a principal diagnosis of mental disorder.
- 54.3% of the hospitalizations with a principal diagnosis of mental disorder were among recipients ages 30 to 44; 52.1% were among women.
- Other leading causes of hospitalizations included heart disease (11.1%), respiratory conditions (11.1%) and digestive disorders (9.1%).
- Among those hospitalizations with a principal diagnosis of mental disorder, the leading diagnoses included affective disorders, including major depressive disease and bipolar disease (741 hospitalizations, 36.7%) and schizophrenia (459 hospitalizations, 22.7%).

Table 2-B and Graph 2-B.

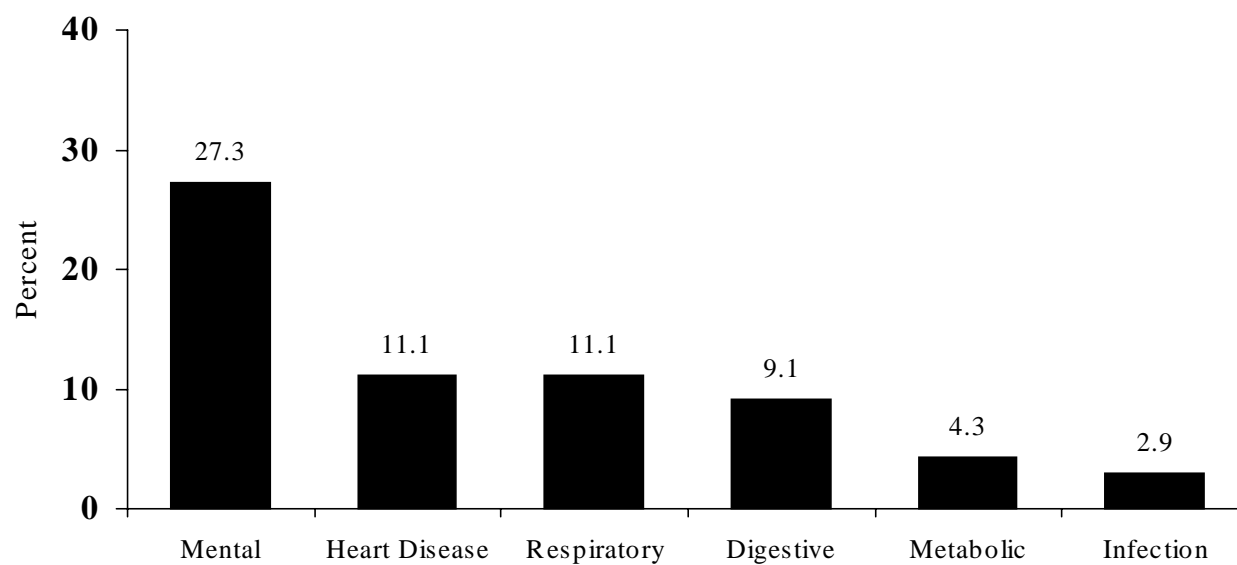
- In calendar year 2000, working-age fee-for-service Medicaid recipients had a total of 25,385 ED visits.
- Mental disorders were the third leading cause of these ED visits. There were 3,488 ED visits (13.7%) with a principal diagnosis of mental disorder.
- 57.1% of the ED visits with a principal diagnosis of mental disorder were among recipients ages 35 to 49; 57.5% were among men.

- Other leading causes of ED visits included ill-defined conditions (21.1%) and injury and poisoning (19.2%).
- Among those ED visits with a principal diagnosis of mental disorder, the leading diagnoses included alcohol dependence syndrome (21.9%), nondependent abuse of drugs (21.0%) and neurotic disorders (15.6%).

TABLE 2-B. Hospital Stays and ED Visits by Principal Diagnosis
FFS Medicaid Recipients Ages 21 to 64 / Calendar Year 2000

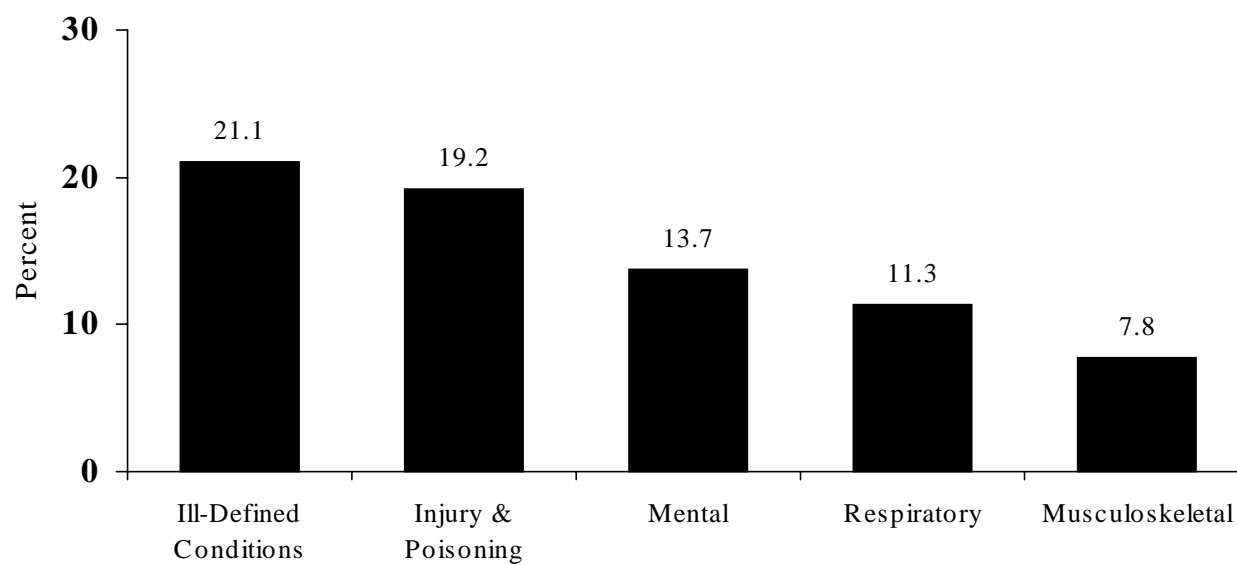
	Hospital Stays				ED Visits			
	Total		Mental Disorder Principal Diagnosis		Total		Mental Disorder Principal Diagnosis	
	#	%	#	%	#	%	#	%
TOTAL	7,397		2,020		25,385		3,488	
AGES								
21 to 24	347	4.7	147	7.3	1,391	5.5	239	6.9
25 to 29	450	6.1	173	8.6	1,937	7.6	212	6.1
30 to 34	608	8.2	285	14.1	2,656	10.5	447	12.8
35 to 39	937	12.7	392	19.4	3,656	14.4	513	14.7
40 to 44	1,155	15.6	420	20.8	4,571	18.0	822	23.6
45 to 49	995	13.5	235	11.6	3,918	15.4	692	19.8
50 to 54	979	13.2	187	9.3	2,757	10.9	290	8.3
55 to 59	990	13.4	99	4.9	2,524	9.9	166	4.8
60 to 64	936	12.7	82	4.1	1,975	7.8	107	3.1
SEX								
Female	4,050	54.8	1,052	52.1	14,462	57.0	1,483	42.5
Male	3,347	45.2	968	47.9	10,923	43.0	2,005	57.5

Graph 1-B: Leading Causes of Hospitalization
by Principal Diagnosis for Fee-for-Service
Medicaid Recipients Ages 21-64



Data Source: Health Indicator Project
Medicaid Data Archive, ICD-9 Groupings
MMIS Extract (2000 n = 7,397)

Graph 2-B: Leading Causes of Emergency Department Visits
by Principal Diagnosis for Fee-for-Service
Medicaid Recipients Ages 21-64



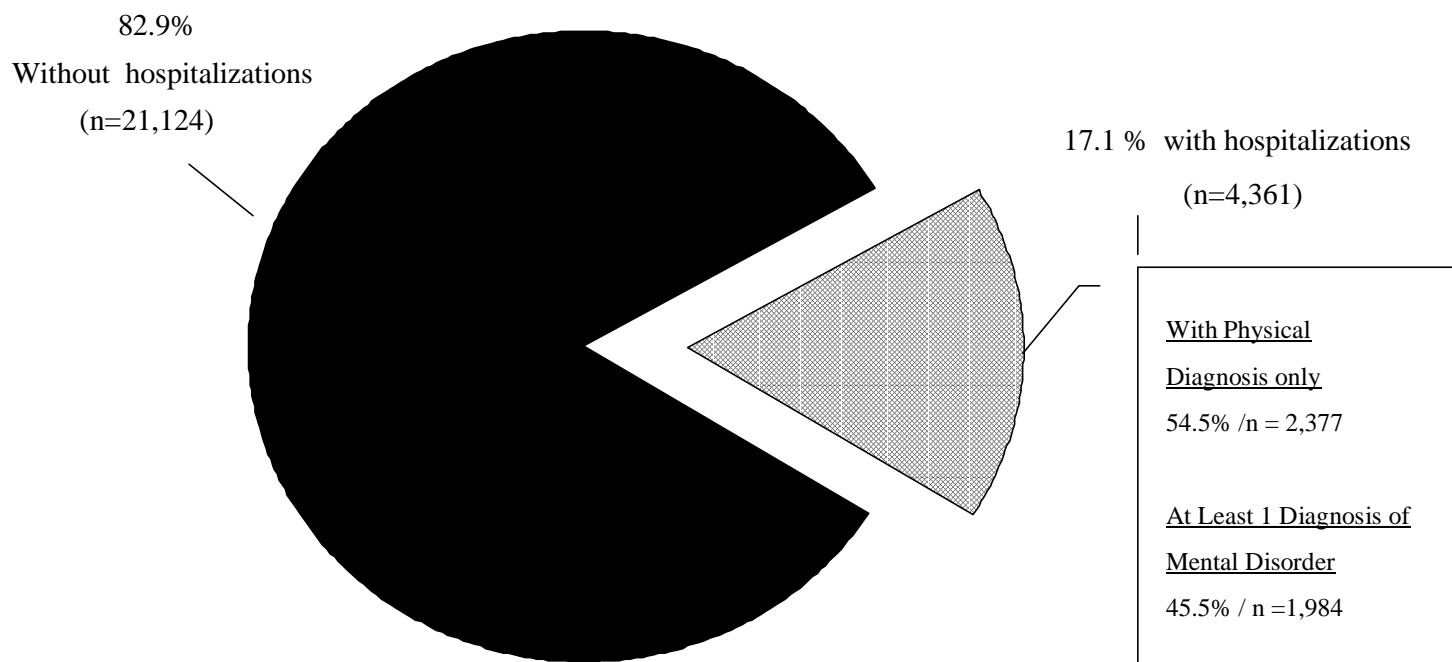
Data Source: Health Indicator Project
Medicaid Data Archive, ICD-9 Groupings
MMIS Extract (2000 n = 25,385 ED Visits)

3. RECIPIENTS WITH HOSPITALIZATIONS BY DIAGNOSIS: PHYSICAL VS. MENTAL

Graph 3-B, Table 3-B and Graph 4-B.

- In calendar year 2000, 17.1% of working-age fee-for-service Medicaid recipients, or 4,361 recipients, had at least one hospitalization.
- Of recipients with at least one hospitalization, 45.5% (1,984 recipients) had at least one principal, secondary or tertiary diagnosis of mental disorder.
- Recipients with at least one diagnosis of mental disorder had more frequent hospitalizations than recipients with no mental disorder diagnoses -- 41.1% of recipients with at least one diagnosis of mental disorder had a repeat hospitalization in calendar year 2000 versus 29.2% of recipients with no diagnosis of mental disorder.
- Further, a larger proportion of recipients with at least one hospitalization with some diagnosis of mental disorder also had an ED visit than recipients with no mental disorder diagnosis -- 81.3% of recipients with at least one diagnosis of mental disorder had an ED visit versus 73.0% of recipients with no diagnosis of mental disorder.
- Finally, a larger proportion of recipients with at least one hospitalization with some diagnosis of mental disorder had more frequent ED visits than did recipients with no mental disorder diagnosis -- 75.5% of recipients with a mental health diagnosis hospitalization and an ED visit had more than one ED visit in 2000 versus 62.2% of recipients with no mental health diagnosis hospitalization and an ED visit.

**Graph 3-B: Percent of Working-Age Adults with Hospitalizations
by Diagnoses¹: Physical vs. Mental**
 Fee-For-Service Medicaid Recipients², Ages 21 to 64
 Calendar Year 2000

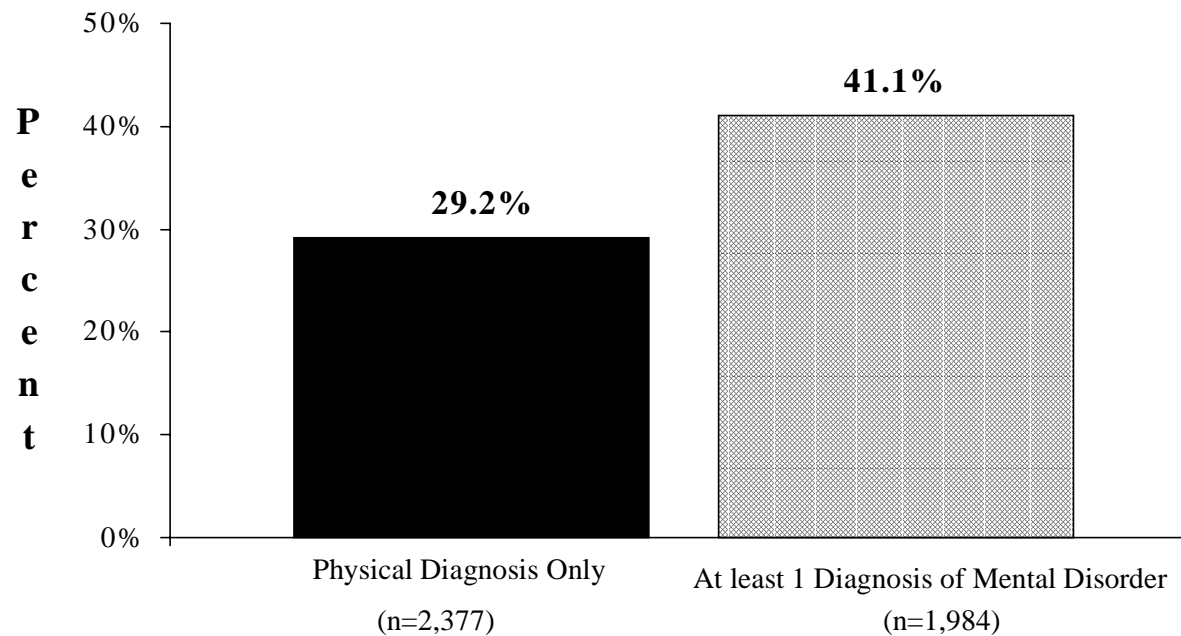


1. Includes Principal, Secondary or Tertiary Diagnosis
2. Total Recipients =25,485

TABLE 3-B. Numbers of Hospitalizations and ED Visits by Diagnosis: Physical vs. Mental
Recipients With at Least One Hospital Stay in Calendar Year 2000
 Fee-for-Service Medicaid Recipients Ages 21 to 64

	Total Enrollees	With No Hospital Stay with a Principal, Secondary or Tertiary Diagnosis of Mental Disorder	With at Least One Hospital Stay with a Principal Diagnosis of Mental Disorder	With No Hospital Stay with a Principal Diagnosis of Mental Disorder but with at Least One Secondary or Tertiary Diagnosis of Mental Disorder
With a Hospital Stay:	4,361	2,377 (54.4%)	1,252 (28.7%)	732 (16.8%)
	%	%	%	%
Hospitalizations:				
One	65.4	70.8	55.8	64.2
Two	19.3	17.9	22.9	17.6
Three or more	15.3	11.2	21.3	18.3
ER Visits:	(n=3,348)/(76.8%)	(n=1,735)/(73.0%)	(n = 1,036)/(82.8%)	(n = 577)/(78.8%)
One	31.4	37.8	22.8	27.6
Two	22.7	24.5	20.8	21.0
Three or more	45.9	37.7	56.4	51.3

**Graph 4-B: Percent of Working-Age Adults with Repeat Hospitalizations
by Diagnoses ¹: Physical vs. Mental**
Fee-For-Service Medicaid Recipients ², Ages 21 to 64
Calendar Year 2000



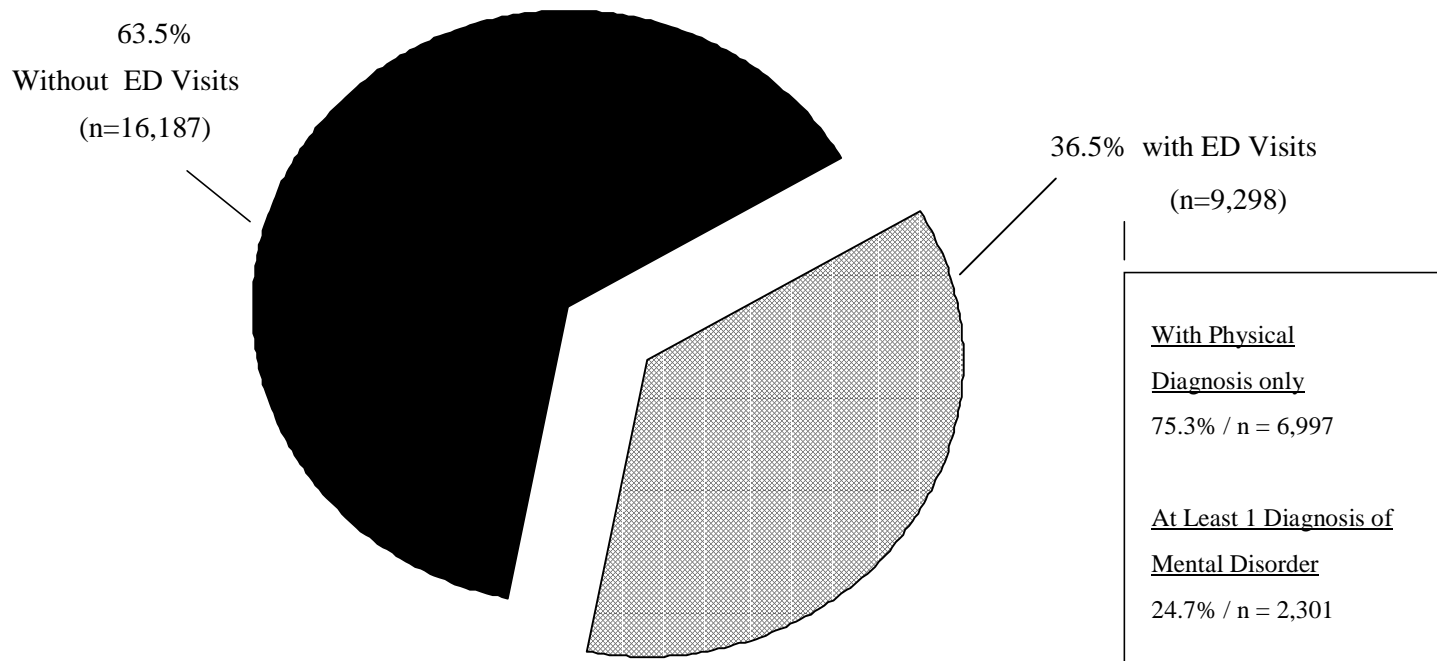
1. Includes Principal, Secondary or Tertiary Diagnosis
2. Total Recipients =25,485

4. RECIPIENTS WITH ED VISITS BY DIAGNOSIS: PHYSICAL VS. MENTAL

Graph 5-B, Table 4-B and Graph 6-B.

- In calendar year 2000, 36.5% of working-age fee-for-service Medicaid recipients, or 9,298 recipients, had at least one ED visit.
- Of these recipients with at least one ED visit, 24.7% (2,301 recipients) had at least one principal, secondary or tertiary diagnosis of mental disorder.
- Recipients with at least one diagnosis of mental disorder had more frequent ED visits than those recipients with no mental disorder diagnoses – 73.7% of recipients with at least one diagnosis of mental disorder had a repeat ED visit in calendar year 2000 versus 45.6% of recipients with no diagnosis of mental disorder.
- Further, a larger proportion of recipients with at least one ED visit with some diagnosis of mental disorder had a hospitalization than did recipients with no mental disorder diagnosis -- 53.5% of recipients with at least one diagnosis of mental disorder had a hospitalization versus 30.3% of recipients with no diagnosis of mental disorder.
- Finally, a larger proportion of recipients with a least one ED visit with some diagnosis of mental disorder had more frequent hospitalizations than did recipients with no mental disorder diagnosis -- 48.6% of recipients with a mental health diagnosis ED visit and a hospitalization had more than one hospitalization in 2000 versus 35.7% of recipients with no mental health diagnosis and a hospitalization.

**Graph 5-B: Percent of Working-Age Adults with ED Visits
by Diagnoses¹: Physical vs. Mental**
Fee-For-Service Medicaid Recipients², Ages 21 to 64
Calendar Year 2000

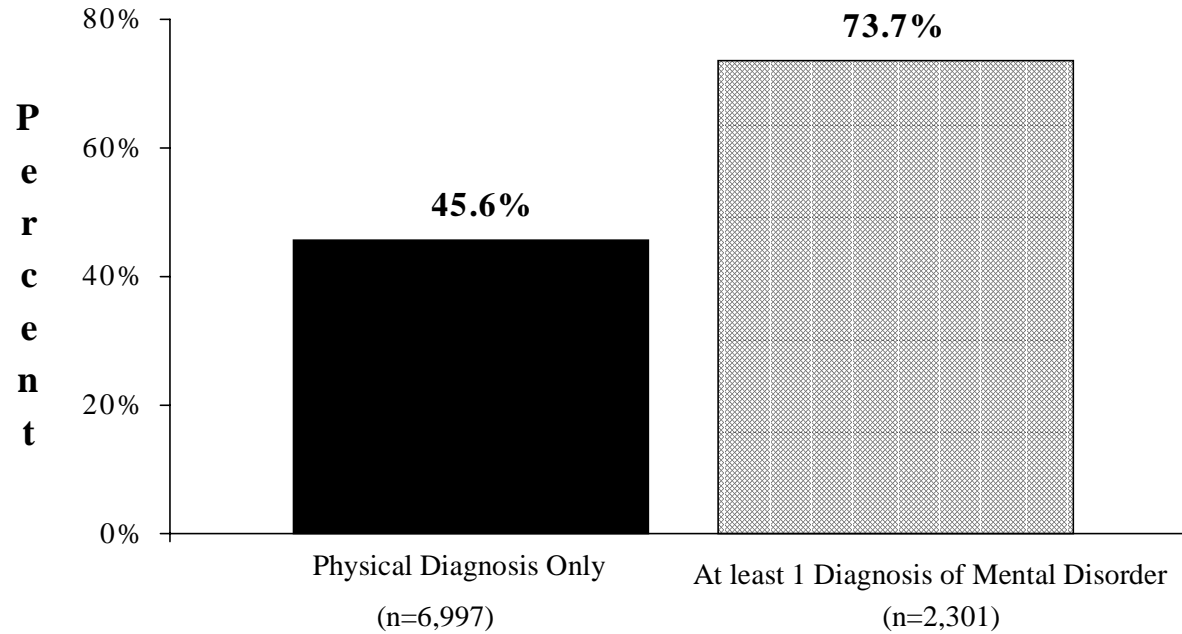


1. Includes Principal, Secondary or Tertiary Diagnosis
2. Total Recipients =25,485

TABLE 4-B. Numbers of ED Visits and Hospitalizations by Diagnosis: Physical vs. Mental
Recipients With at Least One ED Visit in Calendar Year 2000
 Fee-for-Service Medicaid Recipients Ages 21 to 64

	Total Enrollees	With No ED Visit with a Principal, Secondary or Tertiary Diagnosis of Mental Disorder	With at Least One ED Visit with a Principal Diagnosis of Mental Disorder	With No ED Visit with a Principal Diagnosis of Mental Disorder but with at Least One Secondary or Tertiary Diagnosis of Mental Disorder
With an ED Visit:	9,298	6,997 (75.3%)	1,590 (17.1%)	711 (7.6%)
	%	%	%	%
ER Visits:				
One	47.2	54.4	22.7	31.6
Two	22.3	22.8	20.9	20.5
Three or more	30.6	22.8	56.4	47.8
Hospitalizations:	(n = 3,348)/(36.0%)	(n=2,117)/(30.3%)	(n = 917)/(57.7%)	(n = 314)/(44.2%)
One	59.6	64.3	48.9	58.9
Two	21.5	20.5	23.9	20.7
Three or more	19.0	15.2	27.2	20.4

**Graph 6-B: Percent of Working-Age Adults with Repeat ED Visits
by Diagnoses ¹: Physical vs. Mental**
Fee-For-Service Medicaid Recipients ², Ages 21 to 64
Calendar Year 2000



1. Includes Principal, Secondary or Tertiary Diagnosis
2. Total Recipients =25,485

5. EXPENDITURES BY DIAGNOSIS: PHYSICAL VS. MENTAL

Tables 5-B and 6-B.

- 54.5% of working-age fee-for-service Medicaid recipients with at least one hospitalization had no diagnosis of mental disorder and accounted for 53.6% of all hospital expenditures in calendar year 2000. The 45.5% of recipients with at least one hospitalization with a diagnosis of mental disorder accounted for 46.4% of all hospital expenditures.
- Hospital expenditures per recipient were about 3.5% more costly among recipients with some diagnosis of mental disorder than among recipients with no mental disorder diagnosis.
- 75.3% of working-age fee-for-service Medicaid recipients with at least one ED visit had no diagnosis of mental disorder and accounted for 58.3% of all ED expenditures in calendar year 2000. The 24.7% of recipients with at least one ED visit with a diagnosis of mental disorder accounted for 41.7% of all ED expenditures.
- ED expenditures per recipient were 125.6% greater for recipients with at least one principal diagnosis of mental disorder than for recipients with no diagnosis of mental disorder. And ED expenditures per recipient were 98.6% greater for recipients with no principal diagnosis of mental disorder but at least one secondary or tertiary diagnosis of mental disorder than they were for recipients with no diagnosis of mental disorder.
- Overall, ED expenditures per recipient were 117.2% higher for recipients with some diagnosis of mental disorder than for recipients with no diagnosis of mental disorder.

TABLE 5-B. Hospital Use and Expenditures by Diagnosis: Physical vs. Mental
Recipients With At Least One Hospital Stay in Calendar Year 2000
 Fee-for-Service Medicaid Recipients Ages 21 to 64

	With No Hospital Stay with a Principal, Secondary or Tertiary Diagnosis of Mental Disorder	With at Least One Hospital Stay with a Principal Diagnosis of Mental Disorder	With No Hospital Stay with a Principal Diagnosis of Mental Disorder but with at Least One Secondary or Tertiary Diagnosis of Mental Disorder
With a Hospitalization (17.1% of all Recipients):	2,377	1,252	732
Percent (of 4,361 Recipients with a hospitalization)	54.5	28.7	16.8
Number of Hospitalizations (%):			
One	70.8	55.8	64.2
Two	17.9	22.9	17.6
Three or more	11.2	21.3	18.3
Hospital Expenditures:	(\$25,611,284)	(\$13,962,039)	(\$8,157,463)
Percent of all Hospital Expenditures	53.6	29.3	17.1
Expenditures per Recipient	10,775	11,152	11,144

TABLE 6-B. ED Use and Expenditures by Diagnosis: Physical vs. Mental
Recipients With At Least One ED Visit in Calendar Year 2000
 Fee-for-Service Medicaid Recipients Ages 21 to 64

	With No ED Visit with a Principal, Secondary or Tertiary Diagnosis of Mental Disorder	With at Least One ED Visit with a Principal Diagnosis of Mental Disorder	With No ED Visit with a Principal Diagnosis of Mental Disorder but with at Least One Secondary or Tertiary Diagnosis of Mental Disorder
With an ED Visit (36.5% of all Recipients):	6,997	1,590	711
Percent (of 9,298 Recipients with an ED visit)	75.3	17.1	7.6
Number of ED Visits (%):			
One	54.4	22.7	31.6
Two	22.8	20.9	20.5
Three or more	22.8	56.4	47.8
ED Expenditures:	(\$2,923,241)	(\$1,499,222)	(\$590,432)
Percent of all ED Expenditures	58.3	29.9	11.8
Expenditures per Recipient	418	943	830

III. RESULTS

C. ELDERLY

1. MEDICAID POPULATION DESCRIPTION

TABLE 1-C. Medicaid Population: Elderly (Ages 65 and Over)
Calendar Year 2000 – Fee-For-Service Medicaid Recipients

	Total Recipients	
	#	%
TOTAL	24,126	100.0
AGE		
65 to 74	7,727	32.0
75 to 84	8,456	35.0
85 and Over	7,943	32.9
SEX		
Female	18,350	76.1
Male	5,776	23.9

2. HOSPITAL STAYS AND ED VISITS BY PRINCIPAL DIAGNOSIS

Table 2-C and Graph 1-C.

- In calendar year 2000, elderly fee-for-service Medicaid recipients had a total of 4,690 hospitalizations.
- Mental disorders were not a leading cause of these hospitalizations. There were only 185 hospitalizations (3.9%) which documented a principal diagnosis of mental disorder.
- Leading causes of hospitalizations for elderly recipients included heart disease, respiratory conditions and digestive disorders.

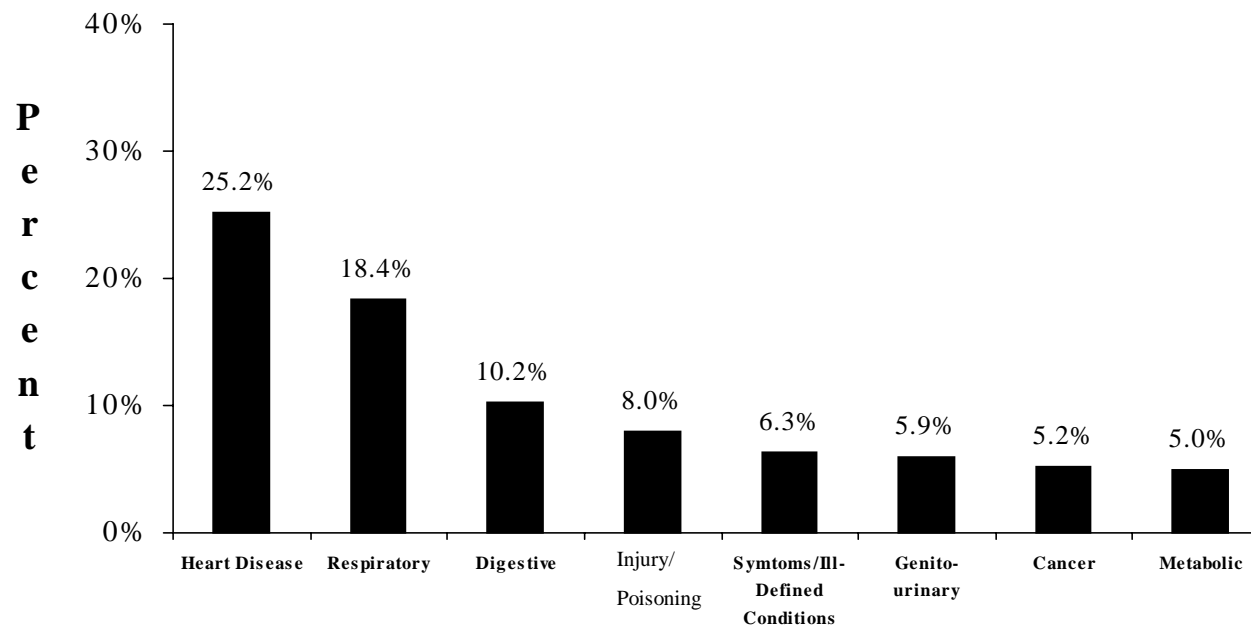
Table 2-C and Graph 2-C.

- In calendar year 2000, elderly fee-for-service Medicaid recipients had a total of 6,065 ED visits.
- Mental disorders were not a leading cause of these ED visits. There were only 237 ED visits (3.9%) which documented a principal diagnosis of mental disorder.
- Leading causes of ED visits for elderly recipients included ill-defined symptoms and conditions, injury and poisonings, respiratory conditions, heart disease and musculo-skeletal conditions.

TABLE 2-C. Hospital Stays and ED Visits by Principal Diagnosis
FFS Medicaid Recipients Ages 65 and Over/Calendar Year 2000

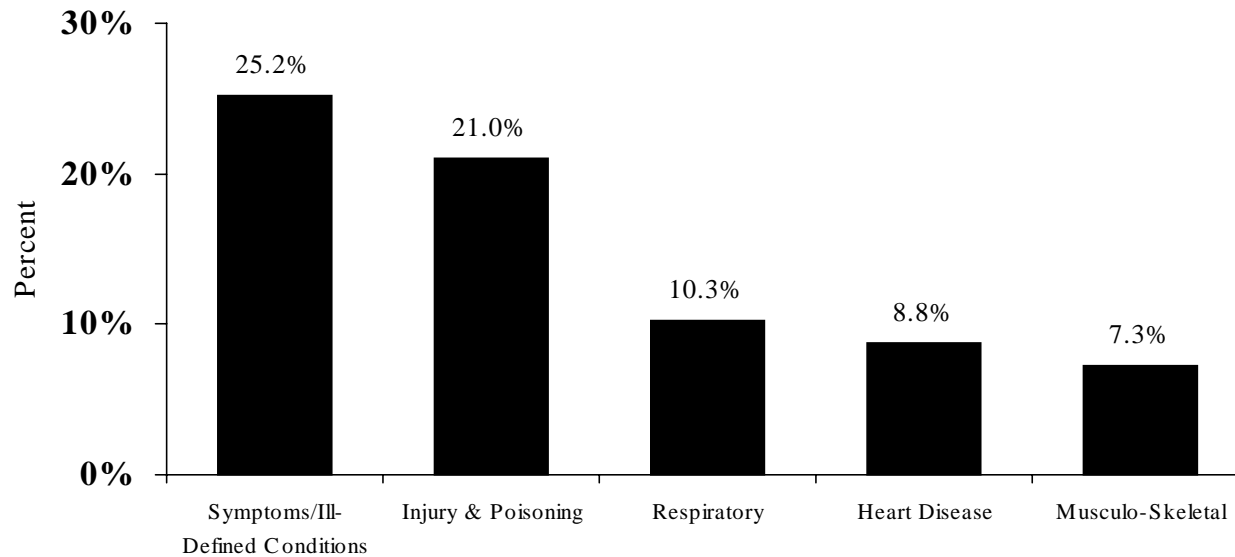
	Hospital Stays				ED Visits			
	Total		Mental Disorder Principal Diagnosis		Total		Mental Disorder Principal Diagnosis	
	#	%	#	%	#	%	#	%
TOTAL	4,690		185		6,065		237	
AGE								
65 to 74	1,772	37.8	78	42.2	2,823	46.5	147	62.0
75 to 84	1,796	38.3	79	42.7	2,093	34.5	64	27.0
85 +	1,122	23.9	28	15.1	1,149	18.9	26	11.0
SEX								
Female	3,500	74.6	138	74.6	4,454	73.4	136	57.4
Male	1,190	25.4	47	25.4	1,611	26.6	101	42.6

Graph 1-C: Leading Causes of Hospitalizations
for Medicaid Recipients Age 65+



Data Source: Health Indicator Project
Medicaid Data Archive, ICD-9 Groupings
MMIS Extract, CY 2000 (n=4,690 Hospitalizations)

**Graph 2-C: Leading Causes of Emergency Department Visits
for Medicaid Recipients Age 65+**



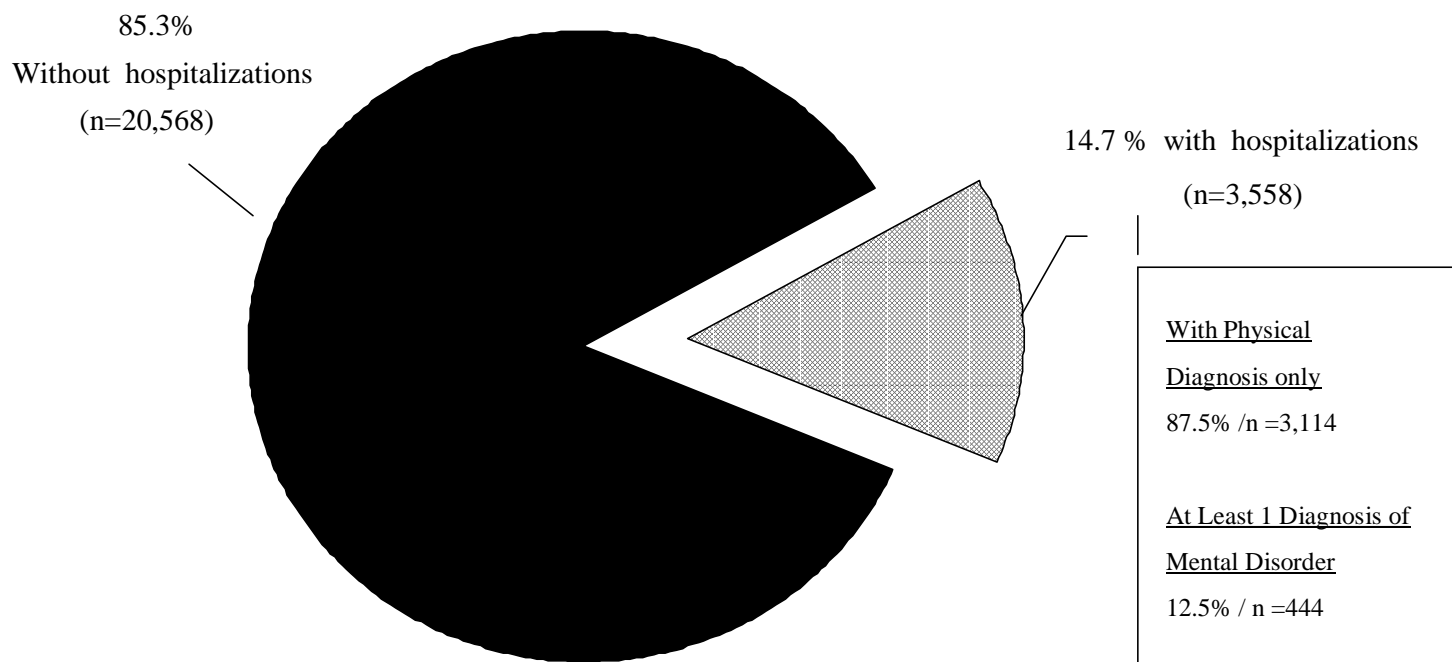
Data Source: Health Indicator Project
Medicaid Data Archive, ICD-9 Groupings
MMIS Extract, CY 2000 (n = 6,065 ED Visits)

3. RECIPIENTS WITH HOSPITALIZATIONS BY DIAGNOSIS: PHYSICAL VS. MENTAL

Graph 3-C, Table 3-C and Graph 4-C.

- In calendar year 2000, 14.7% of elderly fee-for-service Medicaid recipients, or 3,588 recipients, had at least one hospitalization.
- Of recipients with at least one hospitalization, 12.5% (444 recipients) had at least one principal, secondary or tertiary diagnosis of mental disorder.
- Recipients with at least one diagnosis of mental disorder had more frequent hospitalizations than recipients with no mental disorder diagnoses – 30.4% of recipients with at least one diagnosis of mental disorder had a repeat hospitalization in calendar year 2000 versus 21.6% of recipients with no diagnosis of mental disorder.
- A slightly larger proportion of recipients with at least one hospitalization with some diagnosis of mental disorder had an ED visit than did recipients with no diagnosis of mental disorder – 49.8% of recipients with at least one mental disorder diagnosis hospitalization had an ED visit versus 43.2% of recipients with no hospitalization with a diagnosis of mental disorder.

**Graph 3-C: Percent of Elderly with Hospitalizations
by Diagnoses¹: Physical vs. Mental**
 Fee-For-Service Medicaid Recipients², Ages 65+
 Calendar Year 2000

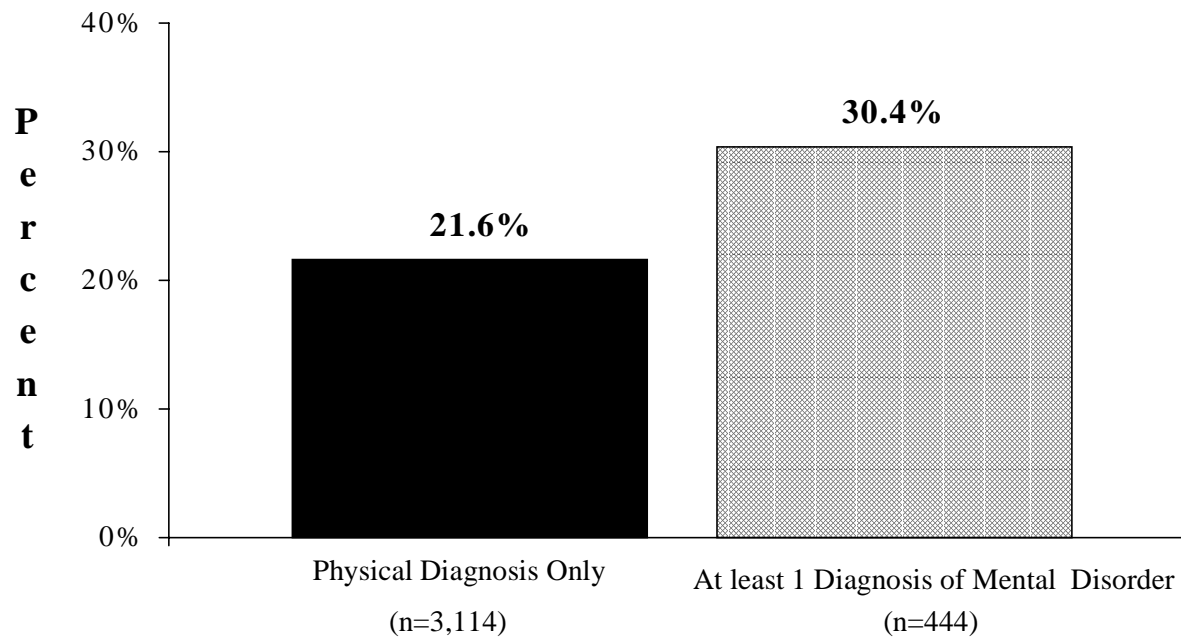


1. Includes Principal, Secondary or Tertiary Diagnosis
2. Total Recipients =24,126

TABLE 3-C. Numbers of Hospitalizations and ED Visits by Diagnosis: Physical vs. Mental
Recipients With at Least One Hospital Stay in Calendar Year 2000
 Fee-for-Service Medicaid Enrollees Ages 65 and Over

	Total Enrollees	With No Hospital Stay with a Principal, Secondary or Tertiary Diagnosis of Mental Disorder	With at Least One Hospital Stay with a Principal Diagnosis of Mental Disorder	With No Hospital Stay with a Principal Diagnosis of Mental Disorder but with at Least One Secondary or Tertiary Diagnosis of Mental Disorder
With a Hospital Stay:	3,558	3,114 (87.5%)	169 (4.7%)	275 (7.7%)
	%	%	%	%
Hospitalizations:				
One	77.3	78.4	65.7	72.0
Two	17.3	16.3	30.2	20.0
Three or more	5.4	5.3	4.1	8.0
ER Visits:	(1,566) / (44.0%)	(1,345) / (43.2%)	(84) / (49.7%)	(137) / (49.8%)
One	56.1	57.4	51.2	46.0
Two	21.1	20.9	20.2	24.1
Three or more	22.8	21.7	28.6	30.0

Graph 4-C: Percent of Elderly with Repeat Hospitalizations
by Diagnosis¹: Physical vs. Mental
Fee-For-Service Medicaid Recipients², Ages 65+
Calendar Year 2000



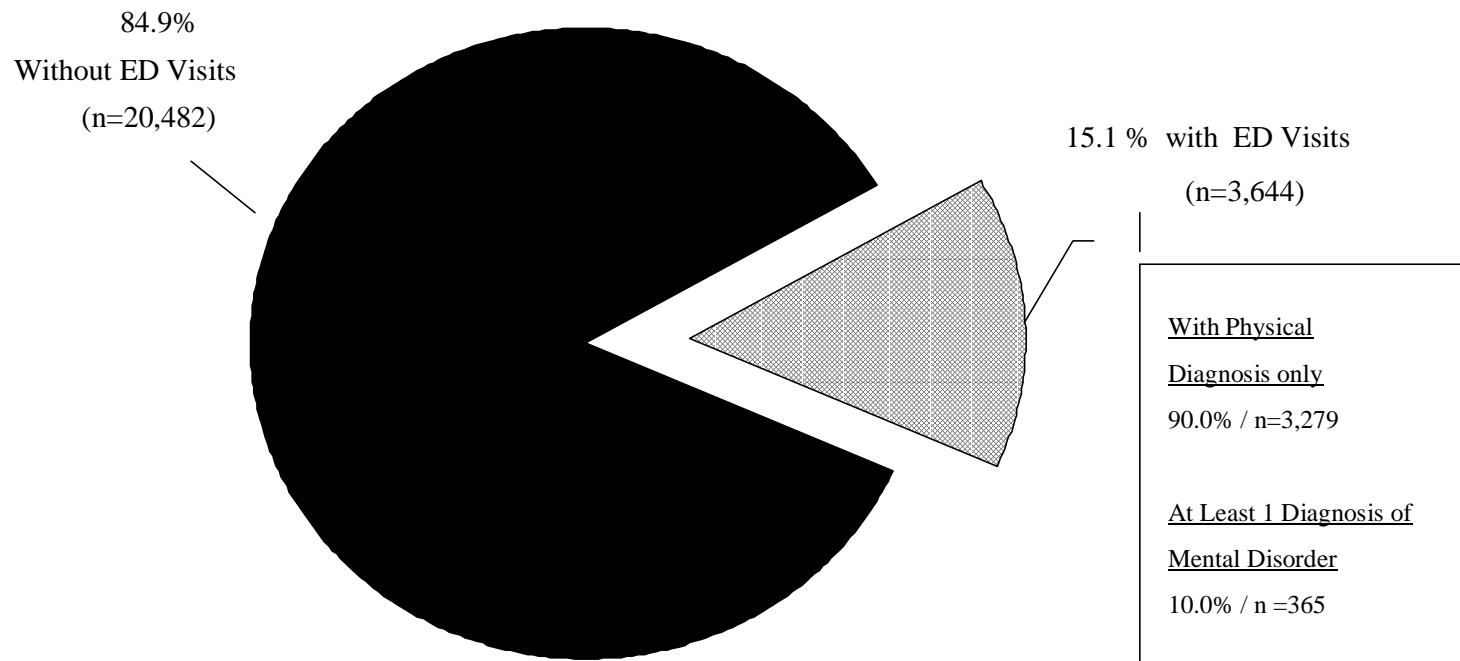
1. Includes Principal, Secondary or Tertiary Diagnosis
2. Total Recipients = 24,126

4. RECIPIENTS WITH ED VISITS BY DIAGNOSIS: PHYSICAL VS. MENTAL

Graph 5-C, Table 4-C and Graph 6-C.

- In calendar year 2000, 15.1% of elderly fee-for-service Medicaid recipients, or 3,644 recipients, had at least one ED visit.
- Of these recipients with at least one ED visit, 10.0% (365 recipients) had at least one principal, secondary or tertiary diagnosis of mental disorder.
- Recipients with at least one diagnosis of mental disorder had more frequent ED visits than recipients with no mental disorder diagnoses -- 57.5% of recipients with at least one diagnosis of mental disorder had a repeat ED visit in calendar year 2000 versus 31.3% of recipients with no diagnosis of mental disorder.
- Further, a larger proportion of recipients with at least one ED visit with some diagnosis of mental disorder had a hospitalization than did recipients with no diagnosis of mental disorder – 51.5% of recipients with at least one diagnosis of mental disorder had a hospitalization versus 34.7% of recipients with no diagnosis of mental disorder.

**Graph 5-C: Percent of Elderly with ED Visits
by Diagnoses¹: Physical vs. Mental**
Fee-For-Service Medicaid Recipients², Ages 65+
Calendar Year 2000

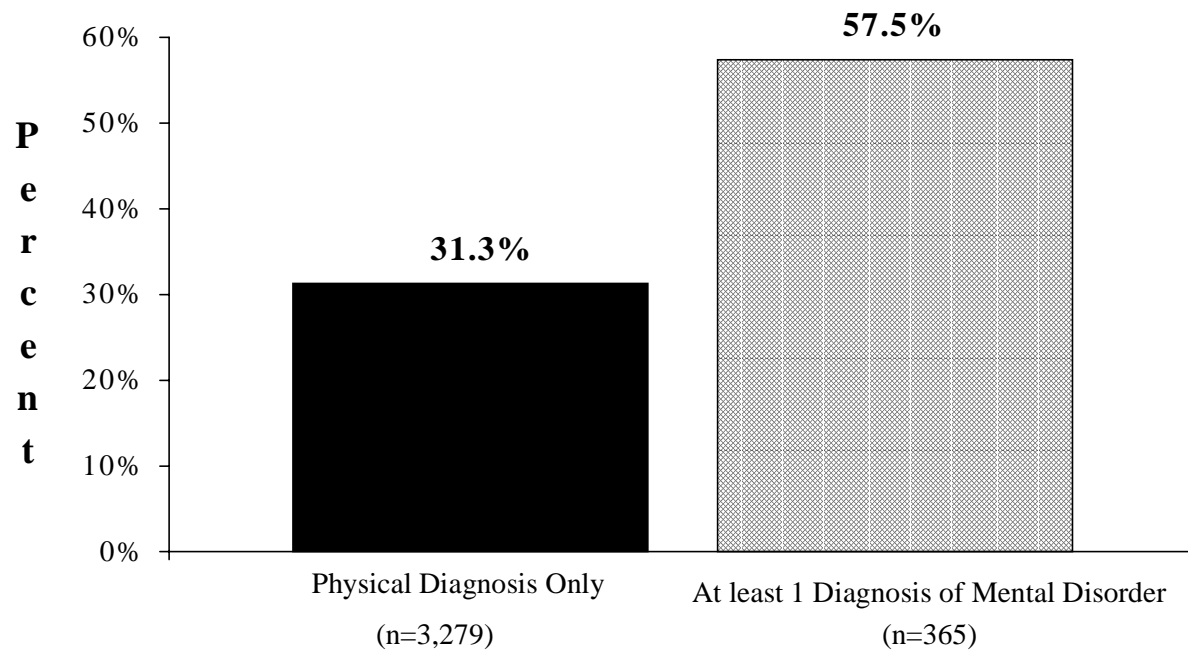


1. Includes Principal, Secondary or Tertiary Diagnosis
2. Total Recipients =24,126

TABLE 4-C. Numbers of ED Visits and Hospitalizations by Diagnosis: Physical vs. Mental
Recipients With at Least One ED Visit in Calendar Year 2000
 Fee-for-Service Medicaid Recipients Ages 65 and Over

	Total Enrollees	With No ED Visit with a Principal, Secondary or Tertiary Diagnosis of Mental Disorder	With at Least One ED Visit with a Principal Diagnosis of Mental Disorder	With No ED Visit with a Principal Diagnosis of Mental Disorder but with at Least One Secondary or Tertiary Diagnosis of Mental Disorder
With an ED Visit:	3,644	3,279 (90.0%)	160 (4.4%)	205 (5.6%)
	%	%	%	%
ER Visits:				
One	66.1	68.7	45.0	40.5
Two	19.3	18.6	20.6	29.8
Three or more	14.7	12.7	34.4	29.7
Hospitalizations:	(1,566) / (43.0%)	(1,378) / (34.7%)	(81) / (50.6%)	(107) / (52.2%)
One	68.5	69.4	55.6	65.4
Two	22.3	21.8	33.3	20.6
Three or more	9.3	8.8	11.1	14.0

**Graph 6-C: Percent of Elderly with Repeat ED Visits
by Diagnoses ¹: Physical vs. Mental**
Fee-For-Service Medicaid Recipients ², Ages 65+
Calendar Year 2000



1. Includes Principal, Secondary or Tertiary Diagnosis
2. Total Recipients =24,126

5. EXPENDITURES BY DIAGNOSIS: PHYSICAL VS. MENTAL

Tables 5-C and 6-C.

- 87.5% of elderly fee-for-service Medicaid recipients with at least one hospitalization had no diagnosis of mental disorder and accounted for 82.3% of all hospital expenditures in calendar year 2000. The 12.5% of recipients with at least one hospitalization with a diagnosis of mental disorder accounted for 17.7% of all hospital expenditures.
- Hospital expenditures per recipient were 34.9% higher for recipients with at least one principal diagnosis of mental disorder than for recipients with no diagnosis of mental disorder. And hospital expenditures per recipient were 61.4% higher for recipients with no principal diagnosis of mental disorder but at least one secondary or tertiary diagnosis of mental disorder than they were for recipients with no diagnosis of mental disorder.
- Overall, hospital expenditures per recipient were 51.3% higher for recipients with some diagnosis of mental disorder than for recipients with no diagnosis of mental disorder.
- 90.0% of elderly fee-for-service Medicaid recipients with at least one ED visit had no diagnosis of mental disorder and accounted for 87.8% of all ED expenditures. The 10.0% of recipients with at least one ED visit with at least one diagnosis of mental disorder accounted for 12.2% of all ED expenditures.
- ED expenditures per recipient were 7.4% higher for recipients with at least one principal diagnosis of mental disorder than for recipients with no diagnosis of mental disorder. And ED expenditures per recipient were 39.7% higher for recipients with no principal diagnosis of mental disorder but at least one secondary or tertiary diagnosis of mental disorder than they were for recipients with no diagnosis of mental disorder.
- Overall, ED expenditures per recipient were 25.7% higher for recipients with some diagnosis of mental disorder than they were for recipients with no diagnosis of mental disorder.

TABLE 5-C. Hospital Use and Expenditures by Diagnosis: Physical vs. Mental
Recipients With at Least One Hospital Stay in Calendar Year 2000
 Fee-for-Service Medicaid Recipients Ages 65 and Over

	With No Hospital Stay with a Principal, Secondary or Tertiary Diagnosis of Mental Disorder	With at Least One Hospital Stay with a Principal Diagnosis of Mental Disorder	With No Hospital Stay with a Principal Diagnosis of Mental Disorder but with at Least One Secondary or Tertiary Diagnosis of Mental Disorder
With a Hospitalization (14.7% of all Recipients):	3,114	169	275
Percent (of 3,558 Recipients with a hospitalization)	87.5	4.7	7.7
Number of Hospitalizations (%):			
One	78.4	65.7	72.0
Two	16.3	30.2	20.0
Three or more	5.3	4.1	8.0
Hospital Expenditures:	(\$7,160,673)	(\$524,232)	(\$1,020,746)
Percent of all Hospital Expenditures	82.3	6.0	11.7
Expenditures per Recipient	2,300	3,102	3,712

TABLE 6-C. ED Use and Expenditures by Diagnosis: Physical vs. Mental
Recipients With At Least One ED Visit in Calendar Year 2000
 Fee-for-Service Medicaid Recipients Ages 65 and Over

	With No ED Visit with a Principal, Secondary or Tertiary Diagnosis of Mental Disorder	With at Least One ED Visit with a Principal Diagnosis of Mental Disorder	With No ED Visit with a Principal Diagnosis of Mental Disorder but with at Least One Secondary or Tertiary Diagnosis of Mental Disorder
With an ED Visit (15.1% of all Recipients):	3,279	160	205
Percent (of 3,644 Recipients with an ED visit)	90.0	4.4	5.6
Number of ED Visits (%):			
One	68.7	45.0	40.5
Two	18.6	20.6	29.8
Three or more	12.7	34.4	29.7
ED Expenditures:	(\$445,905)	(\$23,299)	(\$38,942)
Percent of all ED Expenditures	87.8	4.6	7.7
Expenditures per Recipient	136	146	190

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